

#### EQUIPMENT RENTAL SOLUTIONS

# PROJECT PROFILE FORT NELSON GAS PLANT

## CONTACT US

Calgary Headquarters 160, 200 Rivercrest Drive SE Calgary, AB T2C 2X5 Tel: (403) 203-4747

filterboxx.com

#### THE CLIENT

The Fort Nelson Gas Plant (FNGP) first came into operation in 1964, 20km south of the town of Fort Nelson, BC. It is the northern-most operating region in North America for gathering and processing natural gas. The plant has a processing capacity of 1.035 billion cubic feet per day (bcf/d); removing over 95% of sulphur from incoming raw gas, the largest of its kind in North America. The source of its gas supply is connected to both conventional and shale gas reserves through more than 1,000 km's of pipelines that extend from the Northwest Territories to Northeastern British Columbia to Northwestern Alberta.

#### THE SITUATION

The original extended aeration sewage plant was constructed in the late 1960's and had to be offline for maintenance and structural design review. The operation needed to continue to operate while the wastewater plant would be offline. A temporary mobile wastewater plant would be an ideal solution to bridge the time when the main plant is down for maintenance until all repairs are made or a complete replacement is online.

The temporary solution would have to deliver approximately 150 - 160 m3/d. It would need to manage periodic incursions of oil/hydrocarbons. It also needed to be mobilized in a very short period of time. The temporary plant needed to operate for up to 9 - 12 months and through the harsh northern winters and temperatures.

## THE SOLUTION

FilterBoxx reviewed the application demands, permit requirements, job site requirements, and operation personnel and was in an ideal situation to provide a comprehensive solution. (*continued on reverse.*)



#### project profile FORT NELSON GAS PLANT

With a fleet of several rental plants, we selected two (2) FilterBoxx 75 m3/d mobile membrane biological reactor (MBR) plants along with one (1) 400 bbl tank to provide gravity feed and oil separation for the temporary plant. FilterBoxx managed the required changes to environmental permits, plant mobilization from our yard, installation supervision, start-up, commissioning, and training of all site unionized operations staff. FilterBoxx provided certified engineering personnel for installation



supervision, start-up, and commissioning as well as operational support for this project. We worked with FNGP personnel to ensure they had the expertise needed to make it a smooth transition from their existing plant to our RemoteBoxx WWTP's.

We continue to have weekly meetings with our client's operators as we review weekly reports on the MBR units and offer our expertise to FNGP operators to any changes to their process that maybe needed. We also have monthly meetings with the FNGP to make sure our support continues to meet their project requirements. FilterBoxx feels communication with our clients to be very important to the success in all our projects.



## HOW WE MADE A DIFFERENCE

FilterBoxx worked closely with the consultant to optimize the MBR process, tank configuration and control strategy for the plant.

The plant worked effectively and provided very high discharge effluent quality immediately upon start-up.

Several years after start-up, FilterBoxx continues to monitor the plant and work closely with the operators to optimize plant performance wherever and whenever possible.